UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,692	10/04/2002	Fumio Negoro	113072.121US1	7779

24395   7590   08/14/2006

WILMER CUTLER PICKERING HALE AND DORR LLP
1875 PENNSYLVANIA AVE., NW
WASHINGTON, DC 20004

EXAMINER
BROWN JR, NATHAN H

ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/018,692	NEGORO, FUMIO
Office Action Summary	Examiner	Art Unit	
	Nathan H. Brown, Jr.	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>(3)</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 December 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-174</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-174</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>6/5/2003</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Examiner's Detailed Office Action

1. This Office is responsive to application 10/018,692, filed December 20, 2001.

2. Claims 1-174 have been examined.

Objections to the Abstract

3. The abstract of the disclosure does not commence on a separate sheet in accordance

with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be

presented on a separate sheet, apart from any other text.

4. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
   (1) if a machine or apparatus, its organization and operation;
   (2) if an article, its method of making;
   (3) if a chemical compound, its identity and use;
   (4) if a mixture, its ingredients;
   (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The syntax of the Abstract is incomprehensible. Examiner cannot determine from the

Abstract if the invention is: (1) a machine or apparatus, its organization and operation; (2)

an article, its method of making; or (5) a process, the steps. Specifically, what is the

invention

> "providing a revolutionary solution to the problem concerned with traditional
>
> software, a desired software and its requirement is decided by solving the
>
> Scenario Function that is a theoretical conclusion of Logical Atomism.
>
> Specifically, the Definitive such as Screen, File et al is defined and the
>
> Homogeneity Map is created as well, in which the three components of the
>
> Scenario Function, i.e., W02, W03 and W04 Pallets are placed in
>
> accordance with rule in which semantic quality embodies linearly. Thereafter, the
>
> Tense Control Vector with a prescribed structure to determine the semantic
>
> quality for every word is made into program for every word belonging to the
>
> Definitive."?

5. Applicant is reminded of the proper language and format for an abstract of the
disclosure.

> The abstract should be in narrative form and generally limited to a single paragraph on a
> separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150
> words in length since the space provided for the abstract on the computer tape used by the printer
> is limited. The form and legal phraseology often used in patent claims, such as "means" and
> "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers
> in deciding whether there is a need for consulting the full patent text for details.

> The language should be clear and concise and should not repeat information given in the title. It
> should avoid using phrases which can be implied, such as, "The disclosure concerns," "The
> disclosure defined by this invention," "The disclosure describes," etc.

First, the syntax and content of the Abstract is incomprehensible, e.g.,

"... the Tense Control Vector with a prescribed structure to determine the

semantic quality for every word is made into program for every word belonging

to the Definitive. Characteristics of specific work are reflected in the Self

Creation logic contained in the Tense Control Vector. By operating programs

obtained in this manner accordance with rule of the Synchronous Structure, the

business operational requirements are satisfied"

Second, the Abstract is not terminated by a period, so Examiner does not know if further

parts of the Abstract are missing.

Objections to the Specification

6. The lengthy specification has not been checked to the extent necessary to determine

the presence of all possible minor errors. There are numerous missing periods and other

punctuations. Applicant's cooperation is requested in correcting any errors of which

applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition
> of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

8. Claims 1-174 are rejected under 35 U.S.C. 101 as being directed toward mathematical abstraction, algorithm, and/or software. No claim provides a transformation or reduction of an article to a different state or thing. No claim provides a useful, tangible, or repeatable result, in as far as it can be determined from the specification language which is deemed incomprehensible (see above).

Claim Rejections - 35 USC § 112, 1st

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-174 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As shown above (and below), the claim and specification language is incomprehensible, thus it is impossible to establish a mapping from the claims to the specification, which hold any meaning for the Examiner. Further, it is impossible for the Examiner to establish who would be considered one skilled in the relevant art.

11. Claims 1-174 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

Again, as shown above (and below), the claim and specification language is

incomprehensible, thus it is impossible to establish a mapping from the claims to the

specification, which describe to the Examiner how to make and/or use the invention. For

example, in claim 1,

> "...A first criterion program (Tense Control Vector) to possess a prescribed first
>
> universal structure to realize semantic quality, regardless of the software's
>
> functionality, for every semantic quality belonging to media intervening between
>
> a human and a computer on which a software to be produced operates, the first
>
> universal structure comprising a first undefined part to be filled with an identifier
>
> of the media and a second undefined part to be filled with another identifier of a
>
> subject obtaining the semantic quality existing on the media;..."

who or what possesses "a prescribed first universal structure to realize semantic quality,

regardless of the software's functionality, for every semantic quality belonging to media

intervening between a human and a computer"? Further, how does a finite computer or

human brain represent "every semantic quality belonging to media intervening between a

human and a computer"?

Claim Rejections - 35 USC § 112, 2nd

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-174 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

Claims 1-174 are narrative in form and replete with indefinite and functional or operational language. Consider, for example, claim 86:

"86. The processing apparatus as set forth in Claim 79,

wherein the L2 (k,i) represents Tense Control Vector (WO2 Homogeneity

Vector) which univocally induces semantic quality of WO2 Pallet simulating

the Definite meaning-space on a computer; Y3 (k,i) and L3 (k,i) represent

Tense Control Vector (the former: WO3 Duplication Vector, the latter: WO3

Homogeneity Vector) which univocally induces semantic quality of WO3

Pallet simulating the Event meaning-space on a computer; Y4(k,i) and L4

(k,i) represent Tense Control Vector (the former: WO4 Duplication Vector,

the latter: WO4 Homogeneity Vector) which univocally induces semantic quality

WO4 Pallet simulating the Equivalence meaning-space on a computer; ' Φp{,}k'

represents Pallet Function which collects, for the same amount as k or for all the

system in case there is no k, Tense Control Vectors which are components

enclosed by '{' and '}', while that collection having no condition of their order; k

represents an identifier of the media; i represents an identifier of a word regarded

as a unit for forming the semantic quality; $\Phi 0(+ + +)$ represents Pallet Chain

Function which links the Pallets, which are components inside the (), which is a

process to linearly induce semantic quality via Definite meaning-space, Event

meaning-space and Equivalence meaning-space; T1(f) represents Scenario

Function in a case where the kind of the media includes .and file or Printouts as

well; and P2(j), P3(j) and P4(j) respectively represent Action Vectors with a

complementary logical structure when simulating on a computer the mechanism

in the WO2 Pallet, the WO3 Pallet and the WO4 Pallet, respectively, then, the

Scenario Function is expressed by the following: ..."

Clearly, the structure, which goes to make up the device, is not clearly and positively

specified. Nor, is the structure of the device organized and correlated in such a manner as

to present a complete operative device.

Examination Precluded

The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to

preclude a reasonable search of the prior art by the examiner. The following items are

presented as examples:

Specification, p. 1:

Software determination method, a processing apparatus

1. Title of invention

Software determination method, software usage method, a recording medium, a processing apparatus, software maintenance method, software transplantation method, software Homogeneity Map creation method, method, Pallet Function creation method, Pallet area determination method, Pallet Chain creation Function method, Duplication Vector creation method, Homogeneity Vector creation method, Action Vector creation method. software loading method., software management method, Tense Control Vector creation method, Pallet Function creation method, Pallet area determination method, Pallet Chain creation Function method, Duplication Vector creation method, Homogeneity Vector creation method, Action Vector creation method, software loading method., software development method, data structure replacement method, data value replacement method, an existing program analyzing method, software development management method, a parallel computer, a judgment assisting apparatus, software development business method, file determination method, software operational management method, software univocal determination method, consciousness model devising method, algorithm devising method., a program product, and a transmission wave and a paradigm based program

Examiner cannot determine if this is a title of an invention or a list of its components and, if it is a list of the components of an invention, what the whole of the invention actually

is. Further, since this portion of the text is not terminated by a period, Examiner cannot

determine if the 'title' is complete.

Specification, p. 5:

> After all, a genuine program is, in a sense, is what has eliminated a thinking logic
>
> which ushers a movement of a man handling 'information' concerned with the
>
> target work and functionality, and in this sense, it must not be what contains
>
> 'movements' of such uncertainty of various unpredictable thoughts and conducts
>
> of a man as a stereo-typed programming logic (by use of the knowledge based on
>
> SE's personal ability and experience).
>
> The necessary and sufficient condition to realize this genuine program must be as
>
> follows: To find out a structural rule of a human's thinking logic; and thereafter to
>
> create only information leading to the activation of thinking logic, while
>
> excluding the thinking logic; and to accept, as it is, the information created by the
>
> activated human's thinking logic, in accordance with the rule found.
>
> That is, a software product which can reflect the development intention as it is,
>
> without necessitating SE's intervention, must be called a genuine thing (a correct
>
> solution).

Examiner cannot determine the syntax or meaning of: "a genuine program is, in a sense,

is what has eliminated a thinking logic which ushers a movement of a man handling

'information'". Further, "in a sense" is indefinite. Examiner cannot determine any

meaning in the 'assertion' that: "a genuine program ... is what has eliminated a thinking

logic which ushers a movement of a man ...".

Specification, p. 7:

> A concrete name and nature of an elementary particle, which is the minimum unit
>
> of a material, is expressed by the language. Likewise, the name and setup of the
>
> universe, which is the maximum unit, is expressed by the language. Further,
>
> sensorial feelings such as 'beautiful' 'pleasant', 'comfortable', etc. are also
>
> expressed in language. In these expressions, when an object to be expressed is a
>
> structure composed of materials possessing mass, physical properties, a natural
>
> rule allows us to have an objective and common recognition of its scale, nature,
>
> capabilities, etc., which are elementary factors of the structure. However, how to
>
> sense an object assuming its scale, nature and capabilities, that is, what value and
>
> meaning it possesses exits buried in minds of people recognizing the meaning.
>
> Thus, an objective and common recognition cannot be obtained.

Examiner does understand what is asserted in: "A concrete name and nature of an

elementary particle, which is the minimum unit of a material, is expressed by the

language." What is a "minimum unit of material"? Neutrons, protons, electrons, quarks,

or strings? What language does "language" refer to? Is it a programming language or

natural language. Conversational language, the language of physics or cosmology, the

language of philosophy, the language of logical atomism? Further, Examiner does

understand what is asserted in: "In these expressions, when an object to be expressed is a

structure composed of materials possessing mass, physical properties, a natural rule

allows us to have an objective and common recognition...". Examiner doesn't know

what "natural rule" is referred to. Examiner notes that the conclusion reached: "Thus, an

objective and common recognition cannot be obtained." would seem to contradict, "a

natural rule allows us to have an objective and common recognition".

Specification, p. 51:

... Event meaning-space and Equivalence meaning-space,

Scenario Function is expressed by the following:

$$T0 = \Phi0 \ (+ \ \{\Phi p \ \{ \ , L2 \ (k,i)\} \ \} \ k$$

$$+ \ \Phi p \ \{Y3 \ (k,i) \ , L3 \ (k,i)\}$$

$$+ \ \{ \ \Phi p \ \{Y4 \ (k,i) \ , L4 \ (k,i)\}\} \ k).$$

The aforementioned Scenario Function induced from the providence of existence

which is a universal mechanism applicable to all meaning phenomenon. As this

Scenario Function can be applied regardless of software function, languages,

environments, et al, a prescribed software can be determined by an algebraic

solution of only substituting applicable identifiers into the independent variable

parts of the Scenario Function which possesses a prescribed universal structure.

Examiner cannot determine what "induced from the providence of existence" means in

terms of the mathematics of functions. Is an inductive proof of the function implied?

Examiner cannot determine what "which is a universal mechanism applicable to all

meaning phenomenon" asserts. Is it to be understood that *one* function somehow maps (in a non-trivial fashion) to "all meaning phenomenon"?

Applicant is required to submit an amendment, which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art. Examiner suggests that the Applicant translate the language of the specification and claims to the more contemporary languages of computer science, neuroscience, pattern recognition, and category theory (for the treatment of the abstract mathematical concepts suggested).

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

A shortened statutory period for reply to this action is set to expire ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this letter.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the

PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the

Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free).

Anthony Knight
Supervisory Patent Examiner
Tech Center 2100

Nathan H. Brown, Jr.
July 11, 2006